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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,522	09/01/2006	Asahito Hasegawa	202870205365-US0	6859
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EXAMINER FERGUSON, LAWRENCE D				
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1794				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/598,522

Applicant(s)

HASEGAWA ET AL.

Examiner

LAWRENCE D. FERGUSON

Art Unit

1794

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date 9/9/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment mailed November 7, 2008.

Claims 1 and 9 were amended and claims 8 and 11-20 were cancelled rendering claims 1-7 and 9-10 pending.

Information Disclosure Statement

2. The references disclosed within the information disclosure statement (IDS) submitted on September 9, 2008, has been considered and initialed by the Examiner.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections – 35 USC § 103(a)

4. Claims 1-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelderie et al. (U.S. 6,479,155) in view of Suzuki et al (U.S. 6,042,928).

Gelderie discloses a laminated glass film comprising intermediate layers consisting of different materials including polyvinyl butyral (PVB) and fluorinated hydrocarbons (THV) (column 1, lines 6-7 and column 3, lines 14-21). Gelderie does not

explicitly disclose an adhesive bonding the layers together. Gelderie does not specifically teach an adhesive bonding the PVB and THV layers together. Suzuki teaches a glass laminate having a silane coupling agent adhesive layer to bond the layers together (column 1, lines 4-5 and column 11, lines 46-51). Suzuki teaches adhesively bonding the glass laminate intermediate layers together. Gelderie and Suzuki are combinable because they are related to a similar technical field, which is glass laminates. It would have been obvious to one of ordinary skill in the art to include the silane coupling adhesive layers, as taught by Suzuki, to bond the glass laminate intermediate layers of Gelderie to achieve the predictable result of increasing the durability and internal strength of the glass laminate.

Concerning claim 2, Gelderie discloses the sheets each have a thickness of 0.38 mm (column 3, lines 30-37).

Concerning claims 3 and 6-7, because the intermediate layers comprise sheets including PVB and THV, it is reasonable to expect the additional PVB and THV layers to be on both sides of the laminated film, as the top PVB and THV sheets are near to the top side of the film and the bottom PVB and THV sheets are near the bottom side of the laminate.

Concerning claim 9, Gelderie discloses the laminated glass has two outer glass sheets (column 3, lines 31-34).

Claim Rejections – 35 USC § 103(a)

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gelderie et al. (U.S. 6,479,155) in view of Suzuki et al (U.S. 6,042,928) further in view of Karschti et al (U.S. 6,770,375).

Gelderie and Suzuki are relied upon for instant claim 1, as above. Neither reference discloses the glass plates are made of soda lime glass or borosilicate glass. Karschti teaches a glass laminate composed of glass material made from tempered lime/soda glass or borosilicate glass (column 5, lines 20-27). All of the references are combinable because they are related to a similar technical field, which is glass laminates. It would have been obvious to one of ordinary skill in the art to substitute the soda-lime glass or borosilicate glass of Karschti for the glass of Gelderie and Suzuki because they are functional equivalents and to achieve the predictable result of improving the strength and stability of the laminate (abstract), as in claim 10.

Response to Arguments

6. The rejection made under 35 U.S.C. 103(a) as being unpatentable over Gelderie et al. (U.S. 6,479,155) in view of Triebel et al (U.S. 4,201,828) is withdrawn due to Applicant amending claim 1 to include "to which a silane coupling agent is added".

The rejection made under 35 U.S.C. 103(a) as being unpatentable over Gelderie et al. (U.S. 6,479,155) in view of Triebel et al (U.S. 4,201,828) further in view of Karschti et al (U.S. 6,770,375) is withdrawn due to Applicant amending claim 1 to include "to which a silane coupling agent is added".

The rejection made under 35 U.S.C. 103(a) as being unpatentable over Gelderie et al. (U.S. 6,479,155) in view of Triebel et al (U.S. 4,201,828) in view of Karschti et al (U.S. 6,770,375) further in view of Gutweiler et al (U.S. 5,384,346) is withdrawn due to Applicant amending claim 1 to include "to which a silane coupling agent is added".

Applicant's arguments of the rejection made under 35 U.S.C. 103(a) as being unpatentable over Gelderie et al. (U.S. 6,479,155) in view of Suzuki et al (U.S. 6,042,928) have been considered but are unpersuasive. Applicant argues Gelderie does not disclose that each intermediate layer may comprise multiple layers of different materials. Gelderie discloses a laminated glass film comprising intermediate layers consisting of different materials including polyvinyl butyral (PVB) and fluorinated hydrocarbons (THV) (column 1, lines 6-7 and column 3, lines 14-21). Applicant further argues, in the laminated glass pane assembly of Gelderie, when one of the intermediate layers is formed of PVB and the other intermediate layer is formed of THV, a glass-ceramic pane is located between the PVB layer and the THV layer. Gelderie discloses the intermediate layers are between the glass ceramic pane and the glass panes (column 2, lines 11-16). Additionally, in the section that teaches a glass-ceramic pane having intermediate layers on each of its two faces (column 1, lines 6-14), is interpreted as more than one intermediate layer on each of the two faces, where the intermediate layers on each of the faces consisting of different materials including polyvinyl butyral (PVB) and fluorinated hydrocarbons (THV) (column 3, lines 14-21).

Applicant argues none of the cited references teach the advantage of the present invention of providing a laminated resin film which can be used as interlayer film of a

laminated glass having both good fire resistance and crime prevention properties, which is an intended use of the claimed invention. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Although Applicant is arguing the intended use of the claimed invention, Gelderie is directed to a fire resistant laminated glass pane assembly that is resistant to high temperatures.

Applicant's arguments of the rejection made under 35 U.S.C. 103(a) as being unpatentable over Gelderie et al. (U.S. 6,479,155) in view of Suzuki et al (U.S. 6,042,928) further in view of Karschti et al (U.S. 6,770,375) have been considered but are unpersuasive. Applicant argues claim 10 is not obvious in view of the arguments as above. Because Gelderie and Suzuki have been maintained over instant claims 1-7 and 9, claim 10 is also maintained for reasons of record.

The rejection made under 35 U.S.C. 103(a) as being unpatentable over Gelderie et al. (U.S. 6,479,155) in view of Suzuki et al (U.S. 6,042,928) in view of Karschti et al (U.S. 6,770,375) further in view of Gutweiler et al (U.S. 5,384,346) is withdrawn due to Applicant's cancelling claims 19-20.

7. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil, can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Lawrence Ferguson/
Patent Examiner, Art Unit 1794

/JENNIFER MCNEIL/
Supervisory Patent Examiner, Art Unit 1794